

THICKER, J.

THIGNER, J. The analysis of the dynamics of smoking food products on the basis of physicochemical tests. p. 461. Vol. 10 no. 11, Mev. 1956 PRZENSL SPOZYWOZY, Warszawa Poland

SOURCE: East European Accessions List (EEAL) Vol. 6 No. 4 April 1957

TILIGOR, N. K.

TIL'GOR, N. K. --"The Effect of Phosphoric-Acid Nutrition Conditions on Carbon-Phosphorous Metabolism." Sub 21 Nov 52, Moscow Order of Lenin State U imeri M. V. Lemonosov. (Dissertation for the Degree of Candidate in Biological Sciences).

SO: Vechernaya Moskva January-December 1952

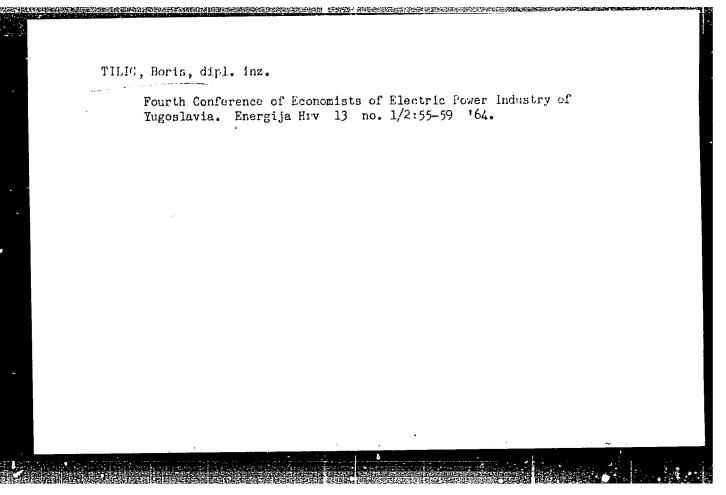
BASLAVSKAYA, Sarra Saulovna; BORODULINA, Frida Zakharovna: POTAPOV, Nikolay Gavrilovich; TIL'GOR, Nikolay Karlovich[deceas d]; TRUBETSKOVA,O1'ga
Mikhaylovna; SOKOLOVA, N.A., red.; LAZAWA, L.V., tehm. red.

[Brief laboratory mamual on plant physiology] Malyi praktikum po
fiziologii rastenii. Izd.4., perer. Moskva, Izd-vo Mosk. univ.,
1961. 68 p.

(Flant physiology—Laboratory mamuals)

Logses of electric energy. Energija Hrv 11 no.9/10:315-323 '62.

1. "Elektra", Zagreb, Gunduliceva 32.



TILIC, I.

Postwar development of trawling on our coasts. p. 160

2000年,1900年,1900年,1900年,1900年,1900年,1900年,1900年,1900年,1900年,1900年,1900年,1900年,1900年,1900年,1900年,1900年 1900年 1

MORSKO TIRARSTVO. (Udrusemje morskog ribarstva Jugoslavije) Rijeka, Yugoslavia. Vol. 11, no. 8, Aug. 1959

Monthly list of East European Accessions (EFAI) LC Vol. 9, no. 2 Feb. 1960

Uncl.

TILIC, I.

Economic research on fishing.

p. 255 (Morsko Ribarstvo. Vol. 5, no. 8, Aug. 1956. Rijeka, Yugoslavia)

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FILIC, I. Reward systems in fishing. p. 281. (Fublished 1957)

(GLASNIK, Vol. 8, No. 9, Sept., 1956

SO: Monthly List of East European Accessions (EEAL) LC Vol. 6, No. 12, Dec. 1957 Uncl.

TILIC. I.

Fish meal. p. 187 (GLASNIK, Vol. 9, No. 7, July 1957)

SO: Monthly List of East European Accessions (EEAL) LC Vol. 6, No. 12, Dec. 1957 Uncl.

THIS, I.

A discussion on the lecture by the academic Mijo Mirkovic.

p. 257 (Morsko Ribarstve. Vol. 8, no. 8, Aug. 1956. Rijeka, Yugoslavia)

Monthly Index of East European Accessions (LMAI) LC. Vol. 7, no. 2, February 1958

TILIC, I.

Results of an inquiry. p. 12. MORSKO RIBARSTVO. (Udruzenje morskog ribarstva Jugoslavije) Rijeka. Vol. 8, no. 1, Jan. 1956

So. East European Accessions List Vol. 5, No. 9 September, 1956

TILIC, I.

Fishing with Danish seines. p. 85. MORSKO RIBARSTVO. (Udruzenje morskog ribarstva J.goslavije) Rijka. Vol. 8, no 3, March 1956.

SOURCE:

East European Accessions List (EEAL), L,brary of Congress Vol. 5, no.11, Nov., 1956.

TILIC, I.

The Dutch As sociation of Fishermen. p. 121

Found in Vol. 8, no. 4, April 1956 In Rigeka, Yugoslavia (MORSKO RIBARSTVO)

So. EAST EUROPEAN ACCESSIONS LIST Vol. 5, No. 7, July 1956

TILIC, I.

The economic and profit aspects of fishing. p. 408. (Gozdarski vestnik, Vol. 8, No. 12, Dec. 1956, Ljuhljana, Yugoslavia)

SO: Monthly List of East European Accessions (EEAL) Lc. Vol. 6, No. 8, Aug 1957. Uncl.

TILIC, I.

Proposed requiations for rewarding successful fishermen. p. 93. (Gozdarski vestaik, Vol. 9, No. 3, Mar. 1957, Ljubljana, Yugslovia)

50: Monthly List of East European Accessions (EEAL) Lc. Vol. 6, No. 8, Aug 1957. Uncl.

TILIC. I.

Results of an inquiry among fisherman retired because of age. p. 94. (Gozdarski vestnik, Vol. 9. No. 3. Mar. 1957, Ljubljana, Yugslovia)

So: Monthly List of East European Accessions (EEAL) Lc. Vol. 6, No. 8, Aug 1957. Uncl.

TILIC, I.

TILIC, I. Production and consumption of marine fish in relation to the population. p. 141.

Vol. 3, No. 5, May 1956.

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Rijeka, Yugoslavia

So: East European Accession, Vol. 6, No. 2, February 1957

TILIC, I.

THE school for the canning industry in Norway. p. 153.

Vol. 8, No. 5, May 1956.

MCRSKO RIBARSTVO

AGRICULTURE

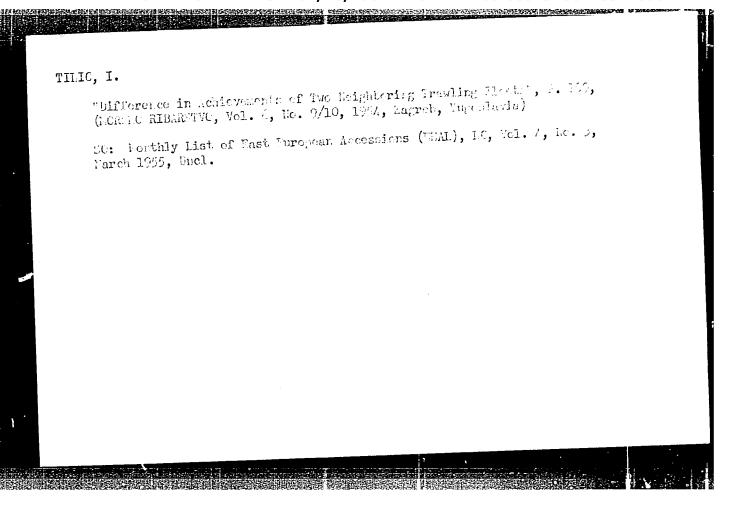
Rijeke, Yugoslavia

So: East European Accession, Vol. 6, No. 2, February 1957

Fishing in Turkey. p. 12 (GLESEE, Vol. 6, as. 1/2, 19)a, educate, Yugoslavia)

O: Monthly list of East European Accessions, (EEaL), LC, Vol. 1, No. 1

Jan. 1955, Uncl.



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"Large purse nets and their lucrativeness", p. 9 (Morsko Ribarstvo, Vol. 5, no. 1/2, 1953, Zagreb)

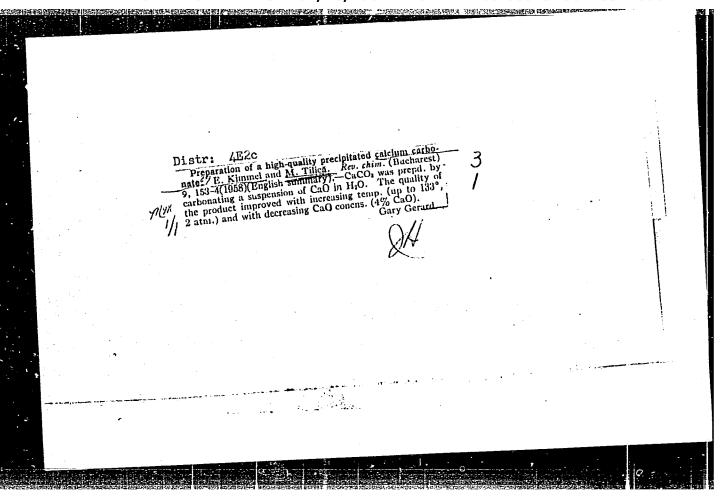
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"Profit-sharing Contracts." p. 69. "New Instructions for Transling." p. 71.

(Morsko Ribaratvo, Vol. 5, no. 5/6, 1953, Zagreb)

SO: Monthly List of East European Accessions, Vol. 3, No. 3. Library of Congress, March 1954. Uncl.



APPROVED FOR RELEASE: 07/16/2001 CIA-RDP86-00513R001755710001-4"

RUMANIA / Chemical Technology. Chemical Products and Horir Applications. Soda Industry.

Abs Jour: Ref Zhur-Khimiya, 1959, No 4, 12364.

Author : Kimmel, E.; Tilica, N.

Inst : Not given.
Title : Obtaining High-Quality Precipitate Calcium Carbon.

ate.

Orig Pub: Rev. Chim., 1958, 9, No 3, 153-155.

Abstract: Results are cited of laboratory experiments on the precipitation of CaCO3. The influence of temperature during precipitation and concentration of CaO was investigated. Properties of the product are determined (apparent density, coefficient of precipitation, moisture, alkalinity and others). --

From the authors resume.

Card 1/1

25

TILICHENKO, A.G., kand. tekhn. nauk (Khabarovsk); POGREBNOY, A.K., inzh. (Khabarovsk); MAZUR, H.N., inzh. (Khabarovsk)

Use of electronic computers for the calculation of technical norms in operational work. Zhel. dor. transp. 46 no.1:78

(MIRA 17:3)

1. Nachal'nik sluzhby dvizheniya Dal'nevostochnoy dogi (for Pogrebnoy).

DMTTRENKO, V.I., dotsent (Khabarovsk); TILICHENKO, A.G., dotsent (Khabarovsk);
YAKOVLEV, Ye.I., dotsent (Khabarovsk)

Computer center for the reilroeds of the Far East. Zhel.dor.transp.
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45 no.2:80 F '63.

1. Rektor Khabarovskogo instituta inzhenerov zheleznodorozhnogo
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(Electronic computers)(Soviet Far East-Railroags-Making up trains)

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Possibility for increasing the weight norms for freight trains.

Zhel.dor.transp. 47 no.10:27-30 0 '65. (MIRA 18:10)

TILICHENKO, A.G., kand. tekhn. nauk, dots., otv. red.; BASHLAY.

[Programming and electronics; a methodological manual]
Programmirovanie i elektronika; metodicheskoe posobla.
Khabarovsk, 1963. 209 p. (MIRA 17:9)

1. Khabarovsk. Institut inzhenerov zheleznodorozhnogo transporta. Vychialitel'nyy tsentr.

POPSUYEV, A.V., kand.tekhn.nauk; TILICHENKO, A.G., kand.tekhn.nauk (Khaharovsk)

Uniform procedures for the operation of railroad and marine transportation. Zhel.dor.transp. 40 no.4:28-31 Ap '58. (MIRA 13:4)

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POPSUYEV, A.V. (Enabarovsk); TILICHENEO, A.G., kandidat tekhni;heskikh nauk (Enabarovsk)

Production-laboratory base for scientific investigations. Zhel. dor.transp. 38 no.10:83 0 '56. (MLRA 9:11)

(Railroad research)

TILICHENKO, A. G.

"Questicus of the Mutual Agreement of the Traffic Schedule With Intermittent Arrivals of Loaded and Empty Cars on Mass Long-Haul Loading Sectors." Cand Tech Sci, Moscow Order of Lenin and Labor Red Banner Inst of Railroad Transport Engineers imeni I. V. Stalin, Min Railways USSR, Moscow, 1954. (KL, No 1, Jan 55)

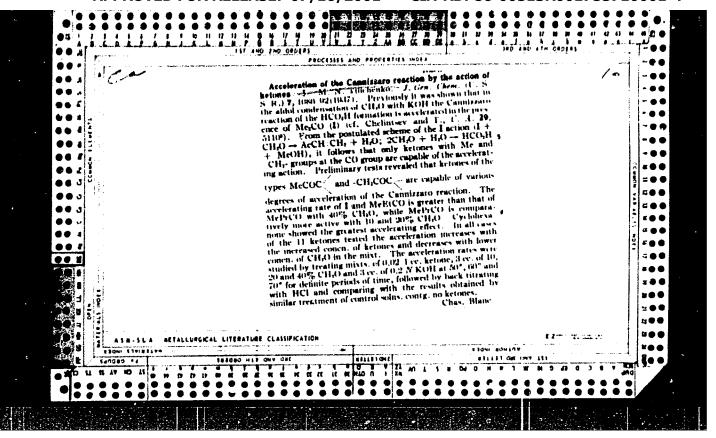
Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (12) SO: Sum. No. 556, 24 Jun 55

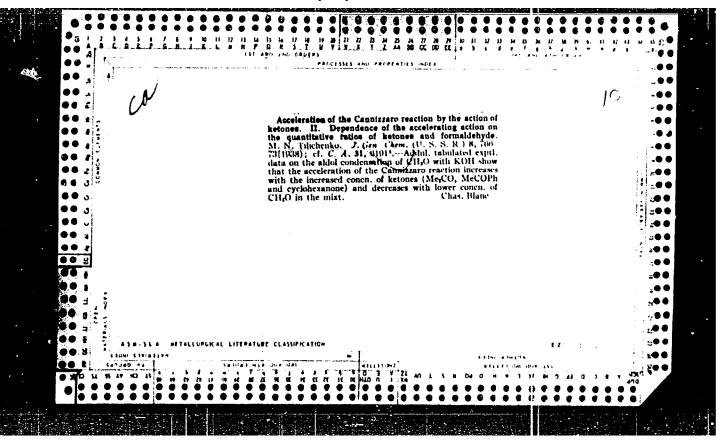
NESTERENKO, G.T., land. tekhn. neuk; SkcZOBIBOV, B.S., inzh.; MIKHEYEV,V.P., inzh.; TILIGHEJKO, A.M.

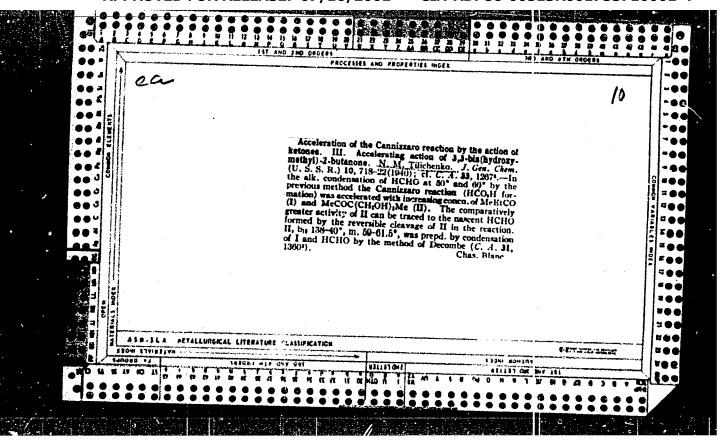
Effect of the angle of incidence on the stability of the exposed roof of chambers. Gor. zhur. no. 12:59-62 D '65.

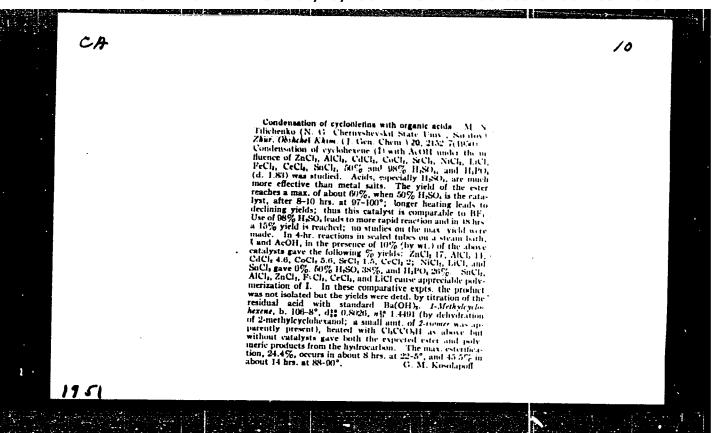
(MIRA 18:12)

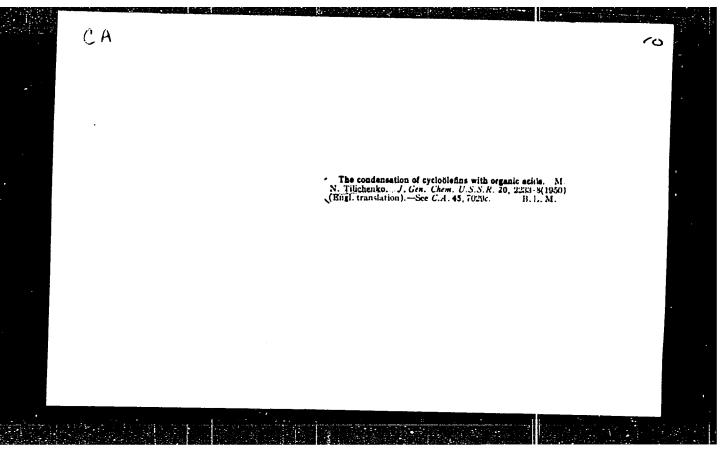
1. Vsesoyuznyy nauchno-insiladovateliskiy marksheyderskiy institut, Leningrad (for Nestorenko, Skozobisov, Mikheyev). 2. Kombinat Achpolimetall, g. Kentau (for Tilichenko).

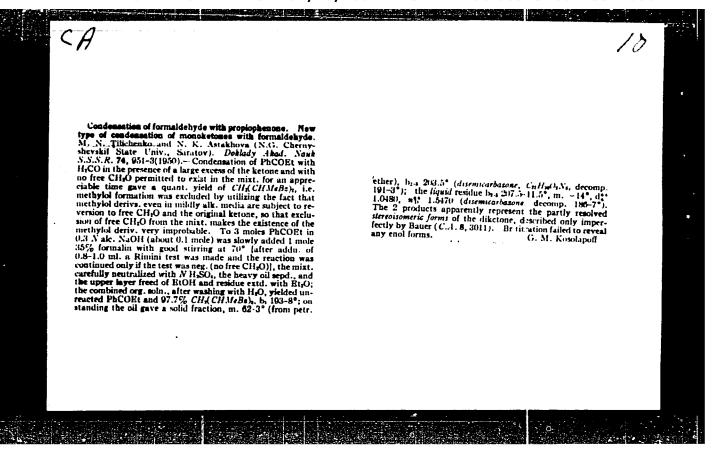












TILICHENKO, M.N.	2.0402	USSR/Chemistry - Plastics (Contd) colorless, very viscous syrups capable of forming gel with H20. Method (b) was more rapid. Discusses reaction mechanism.	"Zhur Prik Khim" Vol XXIV, No 11, pp 1190-1201 Frepu substitution of acetone with HCOH in pres- (I) by condensation of acetone with HCOH in pres- ence of (a) BaOH, (b) NaOH. By evapn of aq and ence of (a) BaOH, (b) NaOH. By evapn of aq and ence of (a) BaOH, (b) NaOH. By evapn of aq and ence of (a) BaOH, (b) NaOH. By evapn of aq and ence of (a) BaOH, (b) NaOH. By evapn of aq and ence of HCOH resulted in tite, while evapn in presence of HCOH resulted in tite, while evapn in presence of These compds were formation of acetalized dimer. These compds vere	USSR/Chemistry - Plastics "Condensation of Acetone With Formaldehyde," M. N. "Tilichenko, A. F. Duganova, Lab of Org Chem, Saratov State U imeni N. G. Cherpyshevskiy

TILICHENKO, M. N.

USSR/Chemistry - Formaldehyde

Nov 51

"Condensation of Menthone With Formaldehyde," M. N. Tilichenko, I. A. Evdokimova, Lab of Org Chem, Saratov State U imení N. G. Chernyshevskiy

"Zhur Prik Khim" Vol XXIV, No 11, pp 1217-1219

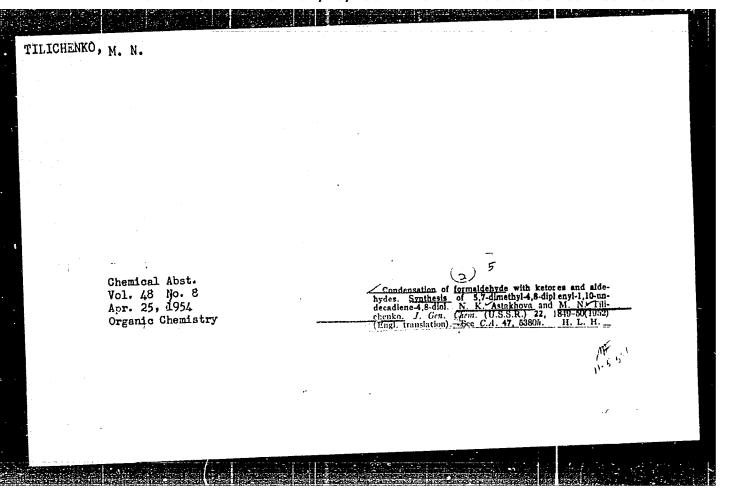
Menthone could be easily condensed with HCOH in alc medium under action of small amts of NaOH to yield inner hemiacetal of (2-methylol-2,2'- dimentholyl)-methane. Isolated product and proposes most probable scheme of its formation, which differs substantially from Tollens' scheme describing mechanism of condensation of HCOH with monoketones (and aldehydes).

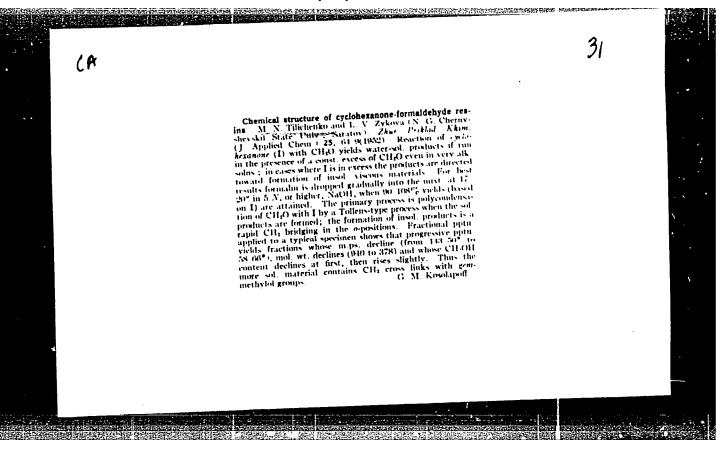
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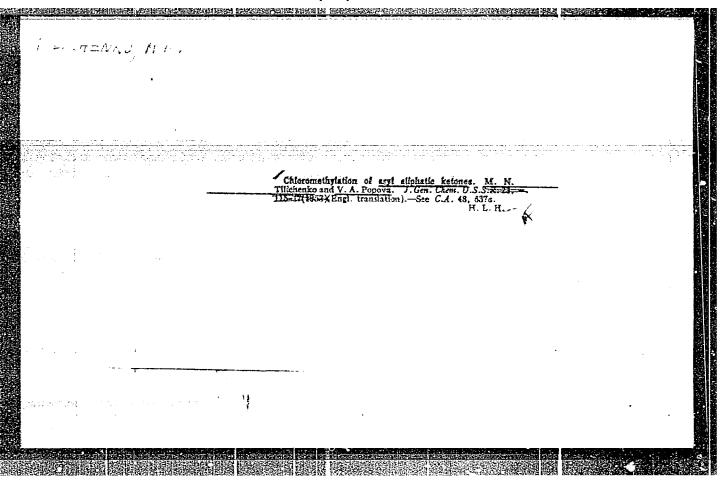
TILICHENKO, M. N.

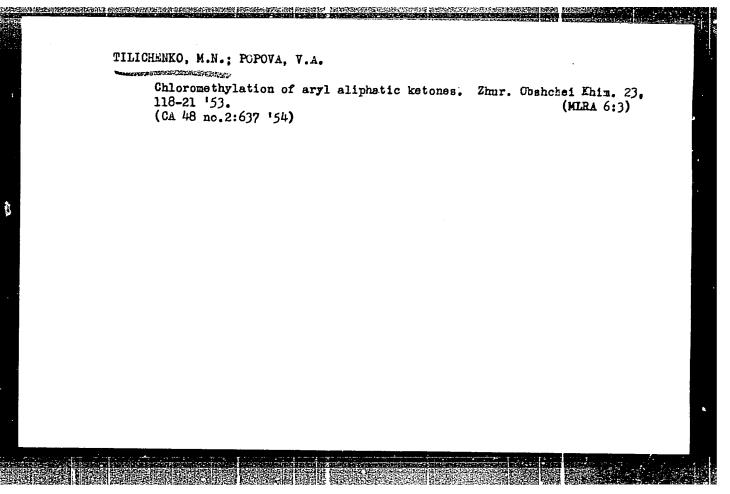
Astakhova, N. K., <u>Tilichenko</u>, M. N.- "Condensation of formaldehyde with ketones and aldehyde. Synthesis of 5, 7-dimethyl -4,8-diphenyl-undecadiene -1,10-dicl -4,8." (p. 1810)

SO: Journal of General Chemistry, (Zhurnal Obshchei Khimii), 1952, Vol. 22, No. 10









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TILICHENKO, M. N.

Chemical Abst.
Vol. 48 No. 9
May 10, 1954
Synthetic Resins and Flastics

Formation of ketone aldehydo restins in polycondensation of acetophenone with formeldehydo. M. N. Therenko and R. M. Burnnova (W. G. Chern, shevial Stife Univ. Saratov). Zhur. Priklad. Rhim. :7, 77-83 1954).—In condensation of HCHO with ArPh with excess of the latter, the reaction leads not to (hydroxymethyl) deriva. of ArPh but to viscous resinous substances and the reaction is a polycondensation. Hence the usual formulation of the Tollens reaction between HCHO and ketones or aldehydes must be extended to polycondensations as well. The main reaction is the formation of polymers with units: —CH-BzCH₈—, along with a relatively unitor reaction: (Bz.

CH₂CH₂).CH₃.O.CH₃ (1), or analogous O-contg. ring structures). In a typical run 1 mole AcPh in EtOH soln, of 0.2 moles NaOH was treated gradually with formalin (1.5 moles CH₃O) at 50°, after which the mixt, was neutralized with H.SO, and the resinous bottom layer was taken up in Et₃O, and the resinous bottom layer was taken up in Et₃O, dried, and evapd., yielding the solid resin of soft glassy character. The product container 78% C, 6.3% H, 0.82-1.13% HO, and had not, wt. 4%, with zero ic line no. Fractional pptn, from CCl₄ with petr, ether gave fractions which changed progressively from hard glasses to viscous sirups, the highest n.p. being 124°, Only 5% of highmelting material was found, some 41% being the liquid form. The higher-melting fractions, were free of HO groups, the lower fractions contain 0.7%-2.1% HO groups. The mol.-wt. range was 489-378.

fraction appears to be essentially BaCH.CH2.O.CH2.C-

 $\{CH_2C(Bz), CH_2, O, CH_2, O, CH_3\}\{Bz\}, CH_2$; the fraction, in. 108.5°, is I, while the sirup appears to be essentially $\{Bz\}$ CH_1CH_2 , CH_3CH_3 .

THERMERING PAR

USSR/Organic Chemistry - Synthetic Organic Chemistry, E-2

Abst Journal: Referat Zhur - Khimiya, No 1, 1957, 849

Author: Tilichenko, M. N.

Institution: Home SARATONSKIY GESCHARSTVENNYY UNIV.

Title: Condensation of Aldehydes with Ketones. II. Synthesis and Thermal

Splitting of 1,5-diketones

Original

Periodical: Zh. obshch. khimii, 1955, Vol 25, No 13, 2503-2509

Abstract: The condensation of CH2O (I), CH3CHO (II), propional dehyde (III), iso-

butyraldehyde (IV) with acetophenone (V) leading to the formation of 1,5-diketones was investigated. It is proposed to name this reaction diketone condensation. The diketones formed subsequently underwent thermal splitting at 245-315°; cleavage occurred at the C-C bond in the β position to the CO-group. The ease of cleavage decreases in the order arylidene-, alkylidene-, methylene-diketone. Condensation was carried out under the same conditions as described previously

was carried out under the same conditions as described previously (Dokl. AN SSSR, 1950, Vol 74, 951). From 12 moles of 34% I and V

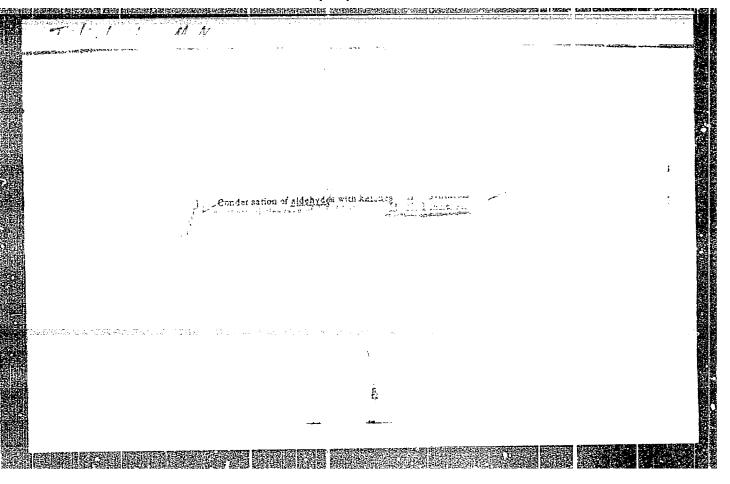
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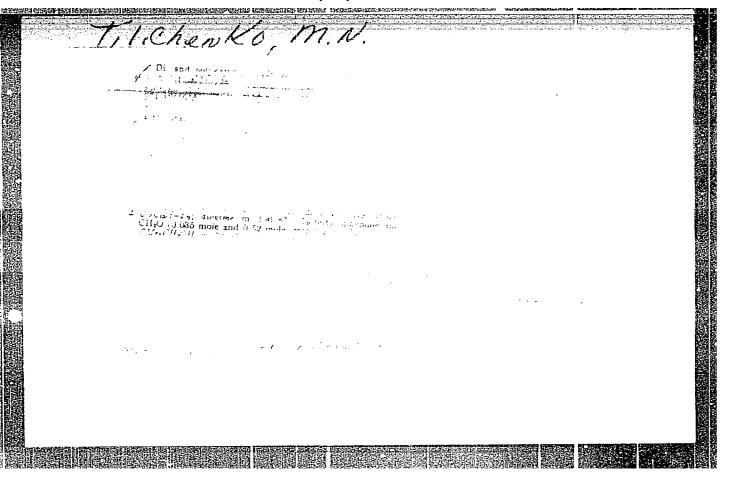
U3SR/Organic Chemistry - Synthetic Organic Chemistry, E-2

Abst Journal: Referat Zhur - Khimiya, No 1, 1957, 849

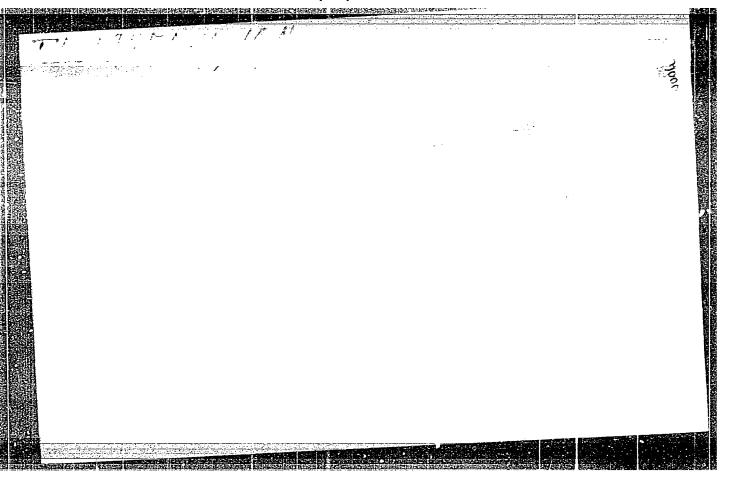
Abstract: methylenediacetophenone (VI) was obtained in yields of 33%, up 67-60°; in addition, the following were formed: dioxime, mp 164-1660; di-2,4dinitrophenylhydrazone, mp 233° (deomposes). II yielded ethylidenediacetophenone (VII), mp 72-73°, dioxime, mp 166-168°; disemicarbazone, mp 208-2090. III yields propylidenediacetophenone, mp 85-860 and disemicarbazone, mp 207-2090. IV yields isobutylidenediacetophenone, mp 140-1410. By reacting NH20H.HCl with VII and HCl with the dioxime of VII, 2,6-diphenyl-4-methylpyridine (VIII) was obtained; the yield in the first case is 92°, mp 66° (from alcohol); in addition a picrate, mp 183.5-184.5, is also formed; VIII·HCl, mp 199-2040 (decomposes); VIII·H₂SO₄, mp 169-1700; VIII·HNO₃, mp 172-1740 (decomposes). The thermal cleavage of VI yields V and a resin which is probably formed by the polymerization of the vinylphenylketone. VII cleaves into V and ethylidenescetophenone, bp 107-109°/8 mm, 129-131°/20 mm, nD 1.5586, d_4^{20} 1.0232; benzylidenescetophenone (mp 85°) yields V and benzalacetophenone; n-dimethyl aminobenzylidenediacetophenone: (mp (24-1250) gives V and n-dimethyl aminobenzalacetophenone, mp 113-114° (from alcohol); methylidenedipropiophenone (bp 207.5-211.5°/ 2.5 mm) yields isopropenylphenol ketone.

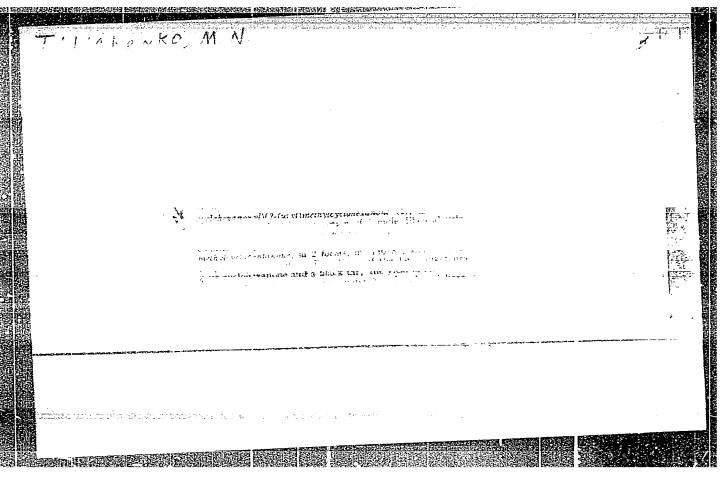
Card 2/2



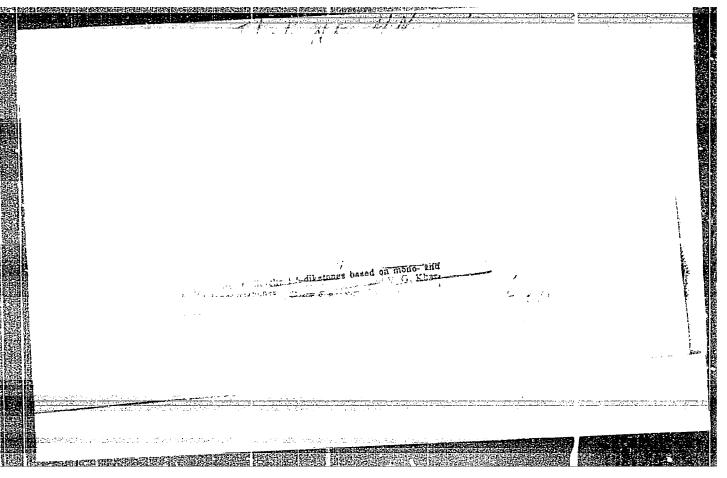


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20-119-6-30/56

AUTHORS:

Tilichenko, M. N., Vysotskiy, V. I.

TITLE:

The Action of Formamide on Isomeric Methylene-Dicyclohexanone and Tricyclohexanolone (Deystviye formamida na izomernyye metilenditsiklogeksanon i tritsiklogeksanolon)

PERIODICAL:

Doklady Akademii nauk SSSR, 1958, Vol. 119, Nr 6, pp.1162-1163 (USSR)

ABSTRACT:

When the authors acted upon the two latter compounds described in a previous work (Ref 1) with formamide, they obtained the same compounds under the conditions of the Leykart-reaction, that is to say, Simm-octohydroacridine and perhydroacridine. This fact proves that tricyclo-hexanolone isomerizes into methylene-dicyclohexanone. The process proceeds with a sufficient speed in order to prevent the products of hydroamination of tricyclohexanolone from forming. The determined reaction is interesting also in preparative respects: it proceeds considerably easily and in a good yield (about 80 %) of bases, and is easily accessible, as well with regard to the technique of performance, as to the initial substances.

Card 1/2

20-119-6-30/56

HISTORY CALLSON BOOK TO BE SEEN TO SEE SEE SEE

The Action of Formamide on Isomeric Methylene-Dicyclohexanone and Tricyclohexanolone

> This is the first example of applying the Leykart-reaction to the alicyclic 1,5-diketones Formerly, it only could be applied to 1,5-diketones of the aliphatic and aryl-aliphatic series (Refs 6, 7). Then follows an experimental part with usual data. There are 9 references, 3 of which are Soviet.

ASSOCIATION: Saratovskiy gosudarstvennyy universitet im. N. G. Cherny-

shevskogo

(Saratov State University imeni N. G. Chernyshevskiy)

December 23, 1957, by B. A. Kazanskiy, Member, Acalemy of PRESENTED:

Sciences, USSR

June 27, 1957 SUBMITTED:

Card 2/2

sov/156-59-2-26/48 5(3) Tilichenko, M. N. The Acid Condensation of Benzal Diacetophenone With Benzalde-AUTHOR: hyde (Kislotnaya kondensatsiya benzal'diatsetofenona s TITLE: benzal'degidom) Nauchnyye doklady vysshey shkoly. Khimiya i khimicheskaya tekhnologiya, 1959, Nr 2, pp 318-321 (USSR) PERIODICAL: The condensation mentioned in the title led in a solution combined with sulfuric acid to the formation of 1,2,4-triphenyl-3,5-dibenzoyl-cyclopentene the structure of which was ABSTRACT: investigated in detail by systematic separation. In the condensation in hydrochloric acid also the hydrochloride of the mentioned compound is formed. In connection with the separation of the added HCl, a mixture of geometric isomers of dibenzylidene benzal diacetophenone, a yellow not crystallizing powder, forms probably as a result of the split- $^{\mathrm{C}}6^{\mathrm{H}}5^{\mathrm{COC}=\mathrm{CHC}}6^{\mathrm{H}}5$ ting up of rings: c6H5CH c6H5COC=CHC6H5. Card 1/2

sov/156-59-2-26/48

The Acid Condensation of Benzel Diacetophenone With Benzaldehyde

The experimental part mentions the operations of condensation and preparation in a pure state carried out under the assistance of V. P. Romanova and E. Yu. Drozdova as well as the analytical and physical data of the compounds obtained. There are 7 references, 3 of which are Soviet.

ASSOCIATION: Kafedra organicheskoy khimii Saratovskogo gosudarstvennogo

universiteta im. N. G. Chernyshevskogo

(Chair of Organic Chemistry, Saratov State University imeni

N. G. Chernyshevskiy)

November 20, 1958 SUBMITTED:

Card 2/2

5(3) SUY/79-29-6-29/72

AUTHORS: Tilichenko, M. N., Kharchenko, V. G.

TITLE: Condensation of Aldehydes and Ketones (Kondensatsiya al'degidov i ketonov). III. Diketone Condensation of Cyclohexanone With Benzaldehyde, a New Way of Condensation of Alicyclic Ketones With Aromatic Aldehydes (III. Diketonnaya kondensatsiya tsiklogeksanona s benzal'degidom (novyy vid uplotneniya alitsikliches-

kikh ketonov s aromaticheskimi al'degidami))

PERIODICAL: Zhurnal obshchey khimii, 1959, Vol 29, Nr 6,

pp 1909 - 1911 (USSR)

ABSTRACT: The authors had already previously found (Ref 1) that the mono-

arylidene-cyclanones are easily dimerized in alcoholic-alkaline media, and that the diarylidene-cyclanones add with the same readiness a molecule of cyclohexanone. Both reactions represent a condensation according to Michael (Scheme 1). Considering this fact it was not clear to the authors that in many papers (Refs 2-6) dealing with the condensation of the cyclanones with aromatic aldehydes only products of the aldol-croton condensation were described and that nobody observed the formation of

Card 1/3 the 1,5-diketones (I). The reason for this fact having been

Condensation of Aldehydes and Retones. III. Biketone SCV/79-29-6-29/72 Condensation of Cyclohexanone With Benzaldehyde, a New Way of Condensation of Alicyclic Ketones With Aromatic Aldehydes

overlooked was, according to their opinion, that the aldol-croton condensation of the alicyclic ketones of the cyclohexanone type with benzaldehyde and other similar aldehydes, which usually takes place in alkaline-aqueous media, proceeds extremely readily, in which connection the products escape reaction owing to their small solubility in the media mentioned. The products of the aldol-croton condensation thus incidentally proved merely to be end products of the reaction. On the basis of this assumption, deriving from cyclohexanone and benzaldehyde, the condensation was carried out in a way that the monomand dibenzal-cyclohexanones remained in the solution when being formed. In this way white crystals of compound (I) (Ar=C6H5)

recrystallize from the reaction solvent after storing for 2-3 days, according to the concentration of the alkali liquer. The diketone condensation (Ref 7) was thus shown to apply also to the condensation range of the alicyclic ketones with aromatic aldehydes. In the reaction products in addition to the diketone (I) also the nonanonol (II) was found (Scheme 2). From this it may be concluded that the reaction mixture contains only

Card 2/3

Condensation of Aldehydes and Ketones. III. Diketone 50V/79-29-6-29/72 Condensation of Cyclohexanone With Benzaldehyde, a New Way of Condensation of Alicyclic Ketones With Aromatic Aldehydes

a small quantity of monobenzal-cyclohexanone and that the formation of 1,5-diketone (I) takes place mainly according to the Michael condensation of cyclohexanone with the resultant intermediates. There are 8 references, 4 of which are Soviet.

ASSOCIATION: Saratovskiy gosudarstvennyy universitet (Saratov State University)

SUBMITTED: June 1, 1958

Card 3/3

AUTHORS: Tilichenko, M. N., Kharchenko, V. G. SOV/79-29-6-30/72

TITLE: Condensation of Aldehydes and Ketones (Kondensatsi/a al'degidov i ketonov). IV. The Phenomenon of Furfurolysis in the Alkaline

Condensation of Ketols and of 1,5-Diketone With Furfurole (IV. Yavleniye furfuroliza pri shchelochnoy kondensatsii ketolov i

1,5-diketona s furfurolom)

PERIODICAL: Zhurnal obshchey khimii, 1959, Vol 29, Nr 6,

pp 1911 - 1914 (USSR)

ABSTRACT: The authors previously observed (Refs 1,2) the interesting phenomenon that the compounds (I), (II), and (III) are rather

readily transformed by furfurole to yield difural-cyclohexanone (IV) according to scheme 1. This splitting-up can be regarded as a furfurolysis, since the above compounds are not transformed under the same conditions without the addition of furfurole. It is of interest that such a splitting-up does not take place under the influence of benzaldehyde. The chemism of this process can be considered a combination of two main reactions: hydro-

lysis and condensation of the hydrolysis products with furfurole (Scheme 2(a,b)). Cyclohexanone and fural cyclohexanone, the

Card 1/2 products of reaction (b) are condensed with furfurole thus

Condensation of Aldehydes and Ketones. IV. The SOV/79-29-6-30/72 Phenomenon of Furfurolysis in the Alkaline Condensation of Ketols and of 1.5-Diketone With Furfurole

yielding difural cyclohexanone. The alkaline cleavage of the cyclic \$\beta\$-ketols (cyclohexanoles) into the 1,5-diketones was observed by W.Diermær and K.Fischer (Ref 4) and also by N. S. Berbulesku (Ref 5). This reaction seems to be opposite to the intramolecular aldol condensation which is in principle in the same way reversible as the intermolecular aldol concensation (Refs 6,7,9). Scheme 2(a,b) explains this furfurelysis as a process in which the furfurole binds the hydrolysis products (I),(II), and (III) with formation of the stable difural cyclohexanone (IV) sparingly soluble in alcoholic medium. Thus the equilibrium in the system is shifted towards the latter compound. In these processes the problem remains to be solved why no analogous splitting-up takes place under the action of benzaldehyde. There are 7 references, 4 of which are Soviet.

ASSOCIATION: Saratovskiy gosudarstvennyy universitet (Saratov State Univer-

SUBMITTED: June 2.

Card 2/2

June 2, 1958

PIT'GA, I. [Pitha, J.]; TILICHENKO, M. N.; KHARCHENKO, V. G.

Condensation of aldehydes and ketones. Part 11: Configuration of 4-R-2,3-cyclohexanobicyclo [3,3,1]-nonan-2-o1-9-ones. Zhur. ob. Khim. 34 no.6:1936-1938 Je '64. (MIRA 17:7)

l. Chekhoslovatskaya Akademiya nauk, Institut organicheskoy kaimii i biokhimii, Dal'nevostochnyy gosudarstvennyy universitet i Saaaa tovskiy gosudarstvennyy politekhnicheskiy institut.

sov/79-29-7-59/83 5 (3) Tilichenko, M. N., Kharchenko, V. G. AUTHORS:

Condensation of Aldehydes and Ketones (Kondensatsiya al'degidov TITLE:

i ketonov). V. Synthesis of 9-Phenyl-perhydroacridine by the Action of Formamide Upon Phenyltricyclohexanolone (V. Sintez 9-fenil-pergidroakridina deystviyem formamida na feniltri-

tsiklogeksanolon)

Zhurnal obshchey khimii, 1959, Vol 29, Nr.7, pp 2370-2372 PERIODICAL:

(USSR)

M. N. Tilichenko and V. I. Vysotskiy described the reaction of ABSTRACT:

formamide with tricyclohexanolone (I) (Ref 1), which is the simplest representative of the carbonyl bridge ketols. The authors obtained these ketols by the diketone-condensation of cyclohexanone with aldehydes (Refs 2-4). The ketol (I) was isomerized previously to give the 1,5-diketone (III) by heating with formamide, which then reacted with formamide yielding perhydro-(V)- and symmetric octahydro-acridine (VII). Phenyltricyclohexanolone was easily prepared by the condensation of cyclohexanone with benzaldehyde (Ref 3) or monobenzalcyclohexane (Ref 3). It reacted similarly on heating with formamide

and gave 9-phenylperhydroacridine(VI) and not the expected oxy-

Card 1/2

Condensation of Aldehydes and Ketones. V. Synthesis SOV/79-29-7-59/83 of 9-Phenyl-perhydroacridine by the Action of Formamide Upon Phenyltricyclohexanolone

amine (VIII). Strangely enough the formation of the corresponding octahydroacridine, as was the case with the ketal, did not take place. The question as to whether this was due to the influence of the C₆H₅-group, or to a slight difference in the reaction conditions must still be investigated. The structure of 9-phenylperhydroacridine was verified by dehydrogenolysis over Pd/C to 9-phenylacridine. Although the reaction required a high temperature (320°), it proceeded smoothly and so quantitatively as to be conclusive for identification of the hydroacridine (6.6 Mol H of the theoretical 7 Mol hydrogen were separated). There are 7 references, 6 of which are Soviet.

ASSOCIATION: Saratovskiy gosudarstvennyy universitet (Saratov State Univer-

sity)

SUBMITTED: June 26, 1958

Card 2/2

AUTHORS: Tilichenko, M. N., Abramova, M. A.,

S/153/60/003/01/035/058 B011/B005

Yegorova, M. Ye.

011/2007

TITLE:

On a New Method of Producing Symm-9-methyloctahydroacridine, and on

2 Isomeric Forms of 9-Methylperhydroacridine

PERIODICAL:

Izvestiya vysshikh uchebnykh zavedeniy. Khimiya i khimicheskaya tekhnologiya, 1960, Vol 3, Mr 1, pp 130-131 (USSR)

TEXT: The method mentioned in the title is based on a fusion of methyl-tricyclohexanclone (I) with hydroxylamine hydrochloride without a solvent (see Scheme). A decycloketolization of ketol (I) to ethylidene-dicyclo-hexanone (II) is assumed to take place at first. Only this (II) is transformed to symm-9-methylocta-hydroacridine (III) under the action of hydroxylamine hydrochloride. This is the first example for a transformation of β -cyclo-hexanolone into a pyridine base by hydroxylamine hydrochloride. The separation of 9-methylperhydroacridine into 2 isomeric forms was obtained by crystallization of its hydrochloride from acetone to which a small quantity of alcohol was added. The two forms are obviously one of the theoretically possible pairs of cis- and trans-isomers of this compound. The experimental part offers characteristics and constants of the substances produced. There are 6 references, 4 of which are Soviet.

Card 1/2

On a New Method of Producing Symm-9-methyloctahydroacridine, and on 2 Isomeric Forms of 9-Methylperhydroacridine

ASSOCIATION: Saratovskiy gosudarstvennyy universitet im. N. G. Chernyshevskogo;

Kafedra organicheskoy khimii (Saratov State University ineni N. G.

Chernyshevskiy; Chair of Organic Chemistry)

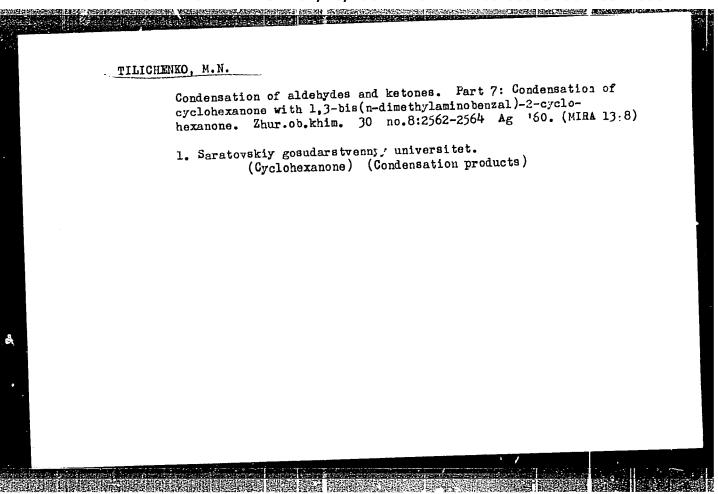
SUBMITTED: February 20, 1959

Card 2/2

TILICHENNO, M.N.; KHARCHENKO, V.G.

Condensation of aldehydes and ketones. Part 6: Conversion of phenyl- and furyltricyclohexanolones into 9-phenyl- and furylhydroacridines. Zhur.ob.khim. 30 no.712283-2285 Jl '60. (MIRA 13:7)

1. Saratovskiy gosudarstvennyy universitet. (Tricyclohexanone) (Acridine)



Condensation of aldehydes and ketones. Part 8: Synthesis of 2, 6-diphenylisonicotinic acid based on the reaction of the dilectonic condensation of acetophenone with acetaldehyde. Zhur.ob.khim. 31 no.5:1558-1560 My '61. (MIRA 14:5)

1. Dal'nevostochnyy gosudarstmennyy universitet. (Isonicotinic acid) (Acetophenone) (Acetaldehyde)

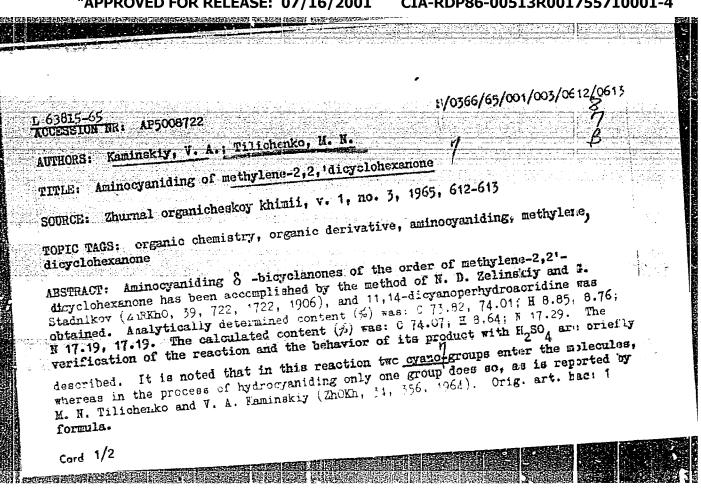
TILICHENKO, M.N.; KHARCHENKO, V.G.; KRUPINA, T.I.

Condensation of aldehydes and ketones. Part 12: Conversion from benzylidenebenzaldicyclohexanone to 4-benzal-9-phenyloctahydrobenzylidenebenzaldicyclohexanone to 4-benzal-9-phenyloctahydrobenzylidenebenzaldicyclohexanone to 4-benzal-9-phenyloctahydrobenzylidenebenzyli

TILICHENKO, M.N.; SOBOLEVA, R.G.; DOMANYUK, T.M.; GAVRILOVA, B.K.

New insecticides; nitrogen bases from polymethylenepolycyclohexanons as insecticides against flies and horseflies. Soob. DVFAN SSSR 20.18; 113-117 163.

1. Dal'nevostochnyy filial imani Komarova Sibirskogo otdeleniya AN SSSR.



CIA-RDP86-00513R001755710001-4" APPROVED FOR RELEASE: 07/16/2001

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TILICHENKO, M.N.; PAVEL', G.V.

Condensation of aldehydes and ketones. Part 15: Aminomethylaticn of 1,5-diketones. Zhur. org. khim. 1 no.11:1992-1994 N '6'. (MIRA 18:12)

1. Dal'nevostochnyy gosudarstvennyy universitet, Vladivostok. Submitted November 13, 1964.

TILICHENKO, M.N.; ZAKNYZHEVSKAYA, I.T.

Conversion form tricyclohexanolone to hydroxytricyclohexylamine.
Zhur. org. khim. 1 mo.4:796-797 Ap '65.

1. Dal'nevostochnyy gosudarstvennyy universitet.

TILICHENKO, M.N.; ETREULESKU, N.S. (Barbulescu, N.); VYSCTSKIY, V.I.

Condensation of aldehydes and ketones, Fart 13: Transformation from tricyclohexenones to tricyclohexenylamines (new type of bridge tricyclohexenylamines). Zhur. org. khim. 1 no.1:93-97 Ja 165. (MIRA 18:5) amines). Zhur. org. khim. 1 no.1:93-97 Ja 165.

1. Bukharestskiy gosudarstvennyy universitet imeni K.I.Parkhona: Dalinevostochnyy gosudarstvennyy universitet.

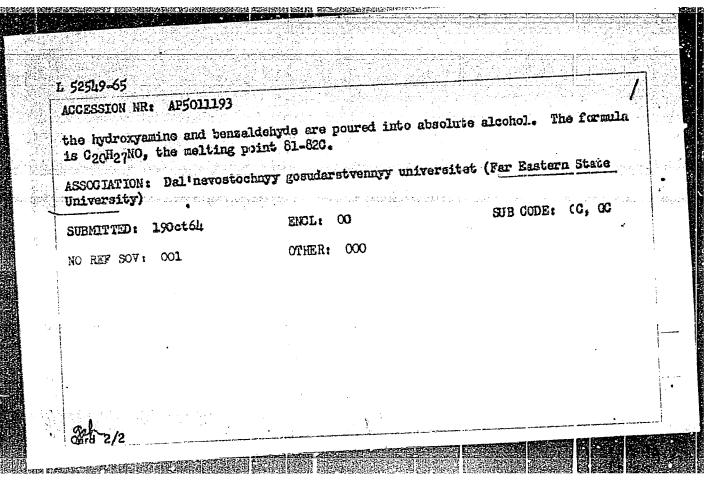
8/0366/55/001/003/04.12/0613 L 63815-65 ACCESSION NR: AP5008722 AUTHORS: Kaminskiy, V. A.; Tilichenko, M. H. TITLE: Aminocyaniding of methylene-2,2,'dicyclohexanone Zhurnal organicheskoy khimii, v. 1, no. 3, 1965, 612-613 SOURCE: TOPIC TAGS: organic chemistry, organic derivative, aminocymiding, methylere, dicyclohexanone ABSTRACT: Aminocyaniding & -bicyclanones of the order of methylene-2,2'dicyclohexanone has been accomplished by the method of N. I. Zelinskiy and I. Stadnikov (ZhRKho, 39, 722, 1722, 1906), and 11,14-dicyanorerhydroacridine ras obtained. Analytically determined content (%) was: 0 73.8%, 74.01; H 8.85, 8.76; N 17.19, 17.19. The calculated content (%) was: C 74.07; il 8.64; H 17.29. The verification of the reaction and the behavior of its product with H2SO4 are briefly described. It is noted that in this reaction two cyanoferoups enter the mclecules, whereas in the process of hydrocyaniding only one group does so, as is reported by M. N. Tilichenko and V. A. Kaminskiy (ZhOKh, 34, 356, 1964). Orig. art. h.s. 1 formula.

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Card 1/2

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JW/RM L 52549-65 ENT(m)/EPF(c)/ENF(j)/ENK(c) FC-4/FT-4 UR/0366/65/001/004/0796/0797 ACCESSION NR: AP5011193 AUTHORS: Tilichenko, M. N.; Zukryzhevskaya, L. T. TITLE: Transition from tricyclohexanolone to oxytricyclohexylamino SOURCE: Zhurnal organicheskoy khimii, v. 1, no. 4, 1965, 796-797 TOPIC TAGS: amine, organic synthesis, reduction method ABSTRACT: Attempts to use the Leuckart reaction to change R-tricyclohexanolones to R-oxytricyclohexylamines have proved unsuccessful. Instead of the expected hydroxyamines, perhydro- and sym-octahydroacridines are obtained. Reduction of the oximes of the indicated ketoles by sodium and alcohol has been successful. This method has produced from tricyclohexanoloxime a base corresponding to 9amino-2,3-cyclohexenol(3,3,1)hicyclononanol-2. The yield is 70%. The product is colorless, hexagonal, with a melting point of 155-100. The formula is C13H23NO. The hydrochloride, with a formula of C13H2 NO.HOL has a melting point of 242-2440. The picrate, \$13H23NO.66H3N3O7 melts at 214-2170. The 11-scetylamine, \$15H25NO2, melts at 176-1770. The IR spactrum shows lines at 1650 (G.O), 3330 (NE), 1570, and 3hio cm-1 (OH). The n-benzylidenamine forms readily when solutions of Card 1/2



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TILICHENKO, M.N.

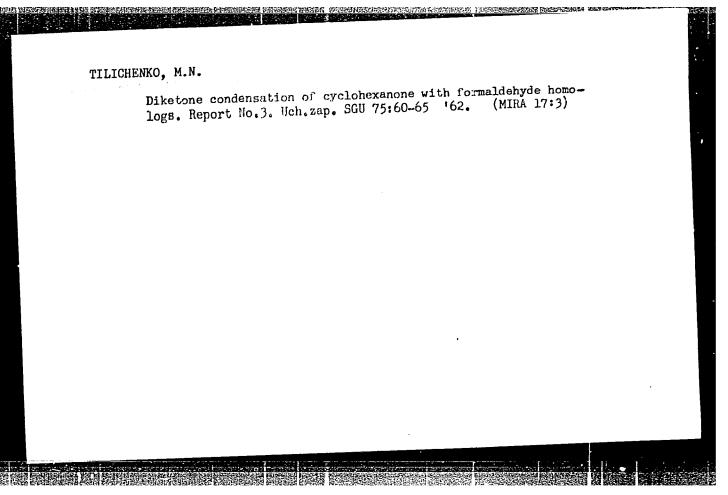
Condensation of aldehydes and ketones. Fart 14; Alkaline condensation of arylaliphatic 1,5-diketones with formaldehyde. Zhur. ob. khim. 35 no.3:443-447 Mr 165. (MIRA 18 4)

1. Dal'nevostochnyy gosudarstvennyy universitet, Vladivostek.

BERBULESKU, N.S. [Barbulescu, N.]; BEDITSE, G. [Badita, Gh.]; TILICENKO, M.N.

New method of conversion of tricyclohexanol oximes and alizyclic
1,5-dioximes to sym-octahydroacridines. Zhur.ob.khim. 33 no.'2:
4027-4029 D 63.

1. Bukharestskiy gosudarstvennyy universitet imeni Parkhona i Dal'nevostochnyy gosudarstvennyy universitet.



TILICHENKO, M.N.; KAMINSKIY, V.A.

Hydrocyanation of methylene-2,2'-dicyclohexanone. Zhur.ob.khim. 34
no.1:356-357 Ja '64.

1. Dal'nevostochnyy gosudarstvennyy universitet, g. Vladivostok.

TILICHENKO, M.N.; DOMANYUK, T.M.

Functional reactions of polymethylenepolycyclohexanone. Zhur

Functional reactions of polymethulenepolycyclohexanone. Zhur. prikl. khim. 36 no.4:890-895 Ap 163. (MIPA 16:7)

1. Laboratoriya organicheskogo sinteza Dal'nevostochnogo filiala Sibirskogo otdeleniya AN SSSR, Vladivostok. (Cyclohexanone) (Polymethylene compounds)

TILICHENKO, M.N.

Synthesis and some properties of polymethylenepolycyclohexanone.
Zhur. Fikl.khim. 36 no.1:192-195 Ja '63. (MIRA 16:5)

1. Kafedra organicheskoy khimii Dal'nevostochnogo gosudarstvennogo universiteta, Vladivostok. (Cyclohexanone)

BARBULESCU, Em.; BARBULESCU, N.; TILICENKO, M.N.

Condensation of cyclohexanone with n- and i-butyric aldehydes. Fev chimie Min petr 12 no.11:631-636 N '61.

1. Universitatea C.I. Parhon, Bucuresti (for Ém. Barbulescu, N. Barculescu).

TILICHENKO, M.N.; YECOROVA, M.Ye.

Synthesis of hydroxyacridine bases. Part 2: Synthesis of 9-mer
thyl-Bz, Bz-octahydroacridine. Uch.zap. SGU 75:68-71 '62.
(MIRA 17:3)

TILICHENKO, M.N.; KHARCHENKO, V.G.

Dimerization of A-arylidenecyclohexanones. Uch.zap. SGU
75:65-68 '62. (MIRA 17:3)

s/080/63/036/001/019/026 D204/D307

AUTHOR:

Tilichenko, M.N.

TITLE:

Synthesis and some properties of poly-

methylene polycyclohexanone (I)

PERIODICAL:

Zhurnal prikladnoy khimii, v. 36, no. 1,

1963, 192 - 195

TEXT: The present work is the 3rd communication in a series of studies of δ-polyketones. Compound I was prepared by adding 9 ml of 34 % formalin to 10 g of cyclohexanone and 20 ml of 0.5 N alcoholic NaOH, at 70 - 75°C, over 30 min, with vigorous stirring. After cooling, the reaction mixture was neutralized with 5 ml of 10 % HCl (to a weakly acid reaction to Congo red). The resulting solid product (9.5 g) was washed with water by decantation and was dried in vacuo. The compound was white, amorphous, soluble in benzene but almost insoluble in cold alcohol, and had a melting range from 116 to 159°C. A second fraction was obtained from the mother liquor by evaporating

Card 1/2

s/080/63/036/001/Q19/026

Synthesis and some ...

off alcohol and adding water. The ir spectrum of I was characterized by 1725 cm^{-1} , 2926 cm^{-1} and 2860 cm^{-1} bands (C=0 and .CH2-groups). The compound exhibited halochromic effects in conc. H2 SO4 and in 85 % HCOOH, giving red colorations. The reaction with HCOOH is characteristic of polyketones of structure I, i.e.

There are 2 figures.

ASSOCIATION:

Kafedra organicheskoy khimii Dal'nevostochnogo gosudarstvennogo universitata, Vladivostok (Departmentment of Organic Chemistry of the Far East State University, Vladivostok)

SUBMITTED:

August 1, 1961

Card 2/2

CIA-RDP86-00513R001755710001-4" APPROVED FOR RELEASE: 07/16/2001

13575-63 EPF(c)/EWT(m)/BDS Pr-4 RM/WW

ACCESSION NR: AP3000189 S/0080/63/035/004/0850/089

AUTHOR: Tilichenko, M. N.; Domanyuk, T. M.

TITLE: Functional reactions of polymethylene-polycyclohexenone

SOURCE: Zhurnal priklednoy khimii, v. 36, no. 4, 1963, 890-895

TOPIC TAGS: colymethylene-polycyclohexenone, carbonyl reagents, CO-groups, dinitrophenylhydrazine, hydroxylemine, perhydroacridine, octahydroacridine

ABSTRACT: The authors studied reactions of polymethylene-polycyclohexarone (PMPC) with some carbonyl reagents. Only the two terminal carbonyl groups of PMPC reacted with 2,4-dinitrophenylhydrazine, while 40-60% of the CO-groups in the chain reacted with hydroxylamine. In a modified Leuckart reaction with formamide, PMPC gave an almost quantitative yield of the perhydroacridine. The polyketone was dissolved in a 1:1 mixture of glacial acetic acid and 85% formic acid with gradual addition of formic acid and heated to 160C for 10 hours so that the acid was distilled over. PMPC gave the octahydroacridine in the Chichibabin reaction with ammonium acetate in glacial acetic acid. IR spectrage of all compounds are presented. Both the perhydroacridine and octahydroacridine had an antihypnotic action on the central nervous system and were effective

Card 1/2

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insecticides. In bot	h the Leuckart and Chichi	babin reactions, 1-3 ket	o groups
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rskogo otdeleniya AN	oriya organicheskogo sint SSSR (Laboratory of Organ	ic Synthesis, Far	liela Sibi-
Eastern Branch, Siber	ien Department AN SSSR, V	ladivostok)	
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Card 2/2			

5/081/62/000/021/015,1069 B156/B101

AUTHORS:

Tilicenko, M. N., Badita, Gh., Barbulescu, N.

TITLE:

Condensation of cyclchexanone with isovaleraldehyde

PERIODICAL:

Referativnyy zhurnal. Khimiya, no. 21, 1962, 141, abstract 21Zh95 (An. Rom.-Sov. Ser. chim., v. 16, no. 4, 1961, 31 - 48 [Rum.; summary in Russ.])

TEXT: When cyclohexanone (I) is condensed with (CH3)2CHCH2CHO (II), the normal products of diketonic condensation are formed: a=isoamylidene cyclohexanone (III), $\alpha_{V}\alpha$ -isoamylidene-bis-cyclohexanone (IV) and (V): СH2CH(CH3)2

ÓH

(\forall). Evidently substitution in the γ -position of the aldehyde

only reduces the reacting power of the intermediate product III by comparison with that of the product of condensation of I with (CH3)2CHCHO. Card 1/4

S/081/62/000/021/015/069 B156/B101

Condensation of cyclohexanone with ...

Reduction of III resulted in the production of isoamyl cyclohexanone (VI). Ozonization showed that α,β -C=C-bonds were present. III is converted into V by the Michael reaction. When V is distilled in vacuo in the presence of OH ions, it is converted into IV, forming two dioximes with melting points of 182 - 184°C (VIIa) and 146 - 148°C (VIIb). The saturation of a solution of VIIa in a mixture of C6H6 and alcohol with HCl provides 9-isobutyl octahydro acridine (VIII). Within 4 hrs, 1.5 moles of II are added to 5 moles of I in 500 ml of 1 N NaOH in boiling alcohol; after 12 hrs $\sim 3/4$ of the solvent is distilled off; six days later, 40 % of V, $C_{17}H_{28}O_2$, m.p. 162 - 1630C (from benzene), is separated. The filtrate is neutralized using phenolphthalein as an indicator), and 401 g of an oily liquid is drawn off with ether; distilling this liquid produces 17.5 g III, C11H180, b.p. 98 - 100° C/1 mm Hg, n_D^{20} 1.4800, d_4^{20} 0.9417, semicarbazone (SC), m.p. 150 - 152°C (from alcohol), and 8 % IV, b.p. 198 - 201°C/mm Hg, n_n^{20} 1.5080. If the IV separated is treated with 40 ml of an alcoholic solution of NaOH, 31 g V are obtained. If 5 g III are hydrogenated in 10 ml absolute alcohol over 0.5 g of Pt-catalyst (760 mm, 9°C, 3.5 hrs, 670 ml H2), 4.7 g VI, Card 2/4

Condensation of cyclohexanone with... S/081/62/000/021/015/069 B156/B101

 $c_{11}H_{20}O$, is separated, b.p. 95 - 96.5°C/2.5 mm Hg, n_D^{20} 1.4580, d_4^{20} 0.9085; SC, m.p. 139 - 140°C (from alcohol). Ozonized 02 (5 % 03) is passed through 5 g III in 20 ml CHCl3 at 70°C for 4 hrs. The result is left for 12 hrs and cooled gradually to 20°C; at 47°C 10 ml water are added and the CHCl, and the II formed during the ozonizing are distilled off with vapor (II is identified as a dimedone derivative after separating the bisulfite derivative from the organic layer of the distillate); the residue is found to contain adipic acid, m.p. 149 - 151°C. To 5 g III and 10 g I at 24°C are added 10 ml of 1 N NaOH in alcohol (in 10 min, the temperature increases to 40°C); six days later, V is drawn off by adding water. 100 g unpurified Y are distilled in vacuo, and 95.5 g IV are obtained, b.p. 208 - 210°C/5 mm Hg, n_D^{20} 1.5010. 90 g IV are added to a solution of 90 g crystalline CH3COONa and 60 g NH2OH. HCl in 500 ml 90 % alcohol; the mixture is boiled for 20 min, 200 ml of the solvent distilled off, and separation carried out in 1 1 water; the result is 96 % of a mixture of VIIa and VIIb, C17H18N2O2; recrystallization from the alcohol produces 80 g VIIa Card 3/4